ALASKA POLLUTANT DISCHARGE ELIMINATION SYSTEM

INDIVIDUAL PERMIT – PROPOSED FINAL

AK0000841 - Tesoro Alaska Petroleum Company LLC
Kenai Refinery

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, AK 99501

In compliance with the provisions of the Clean Water Act (CWA), 33 U.S.C. §1251 *et seq*., as amended by the Water Quality Act of 1987, P.L. 100-4, this permit is issued under provisions of Alaska Statutes (AS) 46.03; the Alaska Administrative Code (AAC) as amended; and other applicable State laws and regulations. The

TESORO ALASKA PETROLEUM COMPANY LLC

is authorized to discharge from the Kenai Refinery located at Mile 22.5 Kenai Spur Highway Kenai, Alaska at the following location(s):

Outfall	Description	Location	Latitude	Longitude
001	Refinery Effluent	Cook Inlet	60.677704°	- 151.395501°

In accordance with the discharge point(s) effluent limitations, monitoring requirements, and other conditions set forth herein:

This permit and authorization shall become effective [insert date]

This permit and the authorization to discharge shall expire at midnight, [insert date]

The permittee shall reapply for a permit reissuance on or before [insert date], 180 days before the expiration of this permit if the permittee intends to continue operations and discharge(s) at the facility beyond the term of this permit.

The permittee shall post or maintain a copy of this permit to discharge at the facility and make it available to the public, employees, and subcontractors at the facility.

PROPOSED FINAL

Signature	Date
Wade Strickland	Program Manager
Printed Name	Title

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SCHEDULE OF SUBMISSIONS

The Schedule of Submissions presented in Table 1 summarizes some of the required submissions and activities the permittee must complete and/or submit to the Alaska Department of Environmental Conservation (DEC) during the term of this permit. The permittee is responsible for all submissions and activities specified in the permit even if they are not summarized in Table 1.

Table 1: Schedule of Submissions

Permit Part	Submittal or Completion	Frequency	Due Date	Submit to[a]
Appendix A, 3.2	Discharge Monitoring Report (DMR)	Monthly	Must be submitted on or before the 28th day of the following month.[b]	Compliance
1.4.4.1	Whole Effluent Toxicity (WET) Monitoring	Semiannually	Must be submitted on or before the 28th day of the following month.	Compliance
1.4.2	Request for WET monitoring frequency reduction.	1/permit cycle	After third year of the Permit term.	Permitting
3.2; 3.6.4	Reformer catalyst regeneration monitoring and biocide inventory.	Annually	January 31st of each year.	Compliance
3.1.2; 3.3.2; 3.4.2.1	Submittal of initial Quality Assurance Project Plan (QAPP), Best Management Practices (BMP) Plan, and Storm Water Pollution Prevention Plan (SWPPP) for DEC records.	1/permit cycle	Within 120 days after the effective date of the final permit	Compliance
3.3.7.2; 3.4.2.3	Written certification of annual review and revision of SWPPP and BMP Plan	Annually	January 31st of each year.	Compliance
3.5.2.1;	Receiving Water Sampling and Analysis Plan (SAP)	1/permit cycle	Within 90 days before first sample event.	Permitting
3.5.2.2	Letter Report summarizing four receiving water sample events.	1/permit cycle	Within 180 days before expiration of this permit	Permitting
Appendix A, 1.3	Application for Permit Reissuance	1/permit cycle	Within 180 days before expiration of this permit	Permitting
Appendix A, 3.4	Oral notification of noncompliance	As Necessary	Within 24 hours from the time the permittee becomes aware of the circumstances of noncompliance	Compliance
Appendix A, 3.4	Written documentation of noncompliance	As Necessary	Within 5 days after the permittee becomes aware of the circumstances	Compliance

a) See Appendix A 1.1 for addresses.
b) This due date supersedes the date shown in Standard Conditions Sections 3.2.1 and 3.2.3 on Page A-9.

1.0 AUTHORIZED DISCHARGES AND PERMIT LIMITATIONS

1.1 Authorized Discharges

1.1.1 Individual permit AK0000841 – Tesoro Alaska Petroleum Company, Kenai Refinery (Permit) authorizes the permittee to discharge pollutants from Outfalls 001- Refinery Effluent and storm water to Cook Inlet, within the limits and subject to conditions set forth herein.

1.1.2 This Permit authorizes discharge of only those pollutants resulting from facility processes, waste streams, and operations clearly identified in the Permit and application process.

1.2 Effluent Limitations and Monitoring Requirements

1.2.1 Prohibitions and Requirements for all Discharges.

1.2.1.1 The discharge of contaminated groundwater that has not received treatment in the refinery wastewater treatment system (RWTS) is prohibited.

1.2.1.2 The discharge of any pollutant or waste stream that is not listed as an authorized discharge under this Permit is prohibited.

1.2.1.3 The discharge of maintenance waste such as removed paint and materials associated with surface preparation and coating application is prohibited.

1.2.1.4 The permittee must minimize the discharge of surfactants, dispersants, and detergents except as necessary to comply with the safety requirements of the Occupational Health and Safety Administration. This restriction applies to tank cleaning and other operations that do not directly involve the safety of workers.

1.2.1.5 When applying effluent limits to commingled discharges, the more stringent effluent limits apply to the commingled discharge. If a commingled waste stream is not authorized per Section 1.1.2, then the commingled discharge is not authorized. Monitoring for compliance with technology-based effluent limits must be accomplished prior to commingling.

1.2.1.6 Discharges shall not cause contamination of surface or ground waters, and shall not cause or contribute to a violation of the Alaska Water Quality Standards (18 AAC 70), except as authorized per 18 AAC 70.240 to 70.255 for mixing zones.

1.2.1.7 Discharges may not alone or in combination with other substances or wastes, make the water unfit or unsafe for the use; cause a film, sheen, or discoloration on the surface of the water or adjoining shorelines; cause leaching of toxic or other deleterious substances; or cause a sludge, solid, or emulsion to be deposited beneath or upon the surface of the water, within the water column, on the bottom, or upon adjoining shorelines.

1.2.1.8 For purposes of reporting on the DMR for a single sample, if a value is less than the method detection limit, the permittee must report “less than [numeric value of method detection limit]” and if a value is less than a minimum level (ML), the permittee must report “less than [numeric value of ML].”

1.2.1.9 For purposes of calculating a monthly average, zero (0) may be assigned for a value less than the method detection limit, and the [numeric value of method detection limit] may be assigned for a value between the method detection limit and the ML. If the average value is less than the method detection limit, the permittee must report "less than [numeric value of method detection limit]" and if the average value is less than the ML, the permittee must report "less than [numeric value of ML]." If a value is equal to or greater than the ML, the permittee must report and use the actual value. The resulting average value must be compared to the limit in assessing compliance.

1.2.1.10 For all effluent compliance monitoring, including additional monitoring per Section 1.3.1, the permittee must use an analytical test method approved under Code of Federal Regulation Title 40 (40 CFR) Part 136 and adopted by reference at 18 AAC 83.010, that can achieve a reporting limit less than the effluent limit. For a parameter without an effluent limit, the permittee must use the method with the most sensitive method detection limit.

1.2.2 Outfall 001 – Refinery Effluent Limits and Monitoring Requirements.

In addition to the general limitations in Section 1.2.1, the permittee must monitor and comply with the maximum daily limits (MDL), average monthly limits (AML), and discharge-specific limitations in Table 2.

Table 2: Effluent Limits and Monitoring Requirements for Outfall 001 – Refinery Effluent

Parameter	Effluent Limits		Monitoring Requirements	
	MDL	AML	Frequency	Sample Type
Flow (million gallons per day (mgd))	Report	Report	Continuous	Recorded
pH (Standard Units (SU))	6.0 to 9.0 [1.2.2.1]		Continuous	Recorded
Temperature (Degrees Celsius (° C))	Report	N/A	1/Week	Grab
Specific Conductance (microsiemens per centimeter)	Report	N/A	1/Week	Grab
Free Oil (Visible Sheen)[1.2.2.2]	No Discharge	No Discharge	1/Week	Grab
Five-day Biochemical Oxygen Demand (BOD_5) (pounds per day (lb/day))	314	168	1/Week	Grab
Chemical Oxygen Demand (COD) (lb/day)	2,002	1,084	1/Week	Grab
Oil and Grease (lb/day)	67	38	1/Week	Grab
Total Suspended Solids (TSS) - October through May (lb/day)	217	136	1/Week	Grab
TSS - June through September (lb/day)	349	223	1/Week	Grab
Total Sulfide (lb/day)	1.98	0.91	1/Week	Grab
Ammonia as Nitrogen (lb/day)	143	65	1/Week	Grab
Phenolic Compounds	1.34	0.62	1/Quarter	Grab
Total Chromium (lb/day)	2.43	1.29	1/Quarter	Grab
Hexavalent Chromium (lb/day)	0.19	0.10	1/Quarter	Grab
Copper, Total Recoverable (micrograms per liter (µg/L))	219	73	1/Month	Grab
Undissociated Hydrogen Sulfide (µg/L)	Report	N/A	1/Month	Grab
Total Aromatic Hydrocarbon (TAH) (µg/L)	Report	N/A	1/Month	Grab
Total Aqueous Hydrocarbon (TAqH) (µg/L)	Report	N/A	1/Month	Grab
Mercury, Total (µg/L)	Report	N/A	1/Quarter	Grab
Cyanide (µg/L)	Report	N/A	1/Quarter	Grab
Chronic WET [1.2.2.3] (Chronic Toxicity Units (TU_c))	Report	N/A	Twice/Year	Grab

1.2.2.1 Allowable pH Excursions. The pH shall not be less than 6.0 SU nor greater than 9.0 SU. The total time outside of the required range shall not exceed seven hours and 26 minutes in any calendar month, and no individual excursion shall exceed 60 minutes.

1.2.2.2 Free Oil Monitoring. Monitoring for "free oil" shall be conducted after the last treatment unit prior to discharge using Environmental Protection Agency (EPA) Method 1617 – Static Sheen Test.

1.2.2.3 WET Testing. Semiannual chronic WET Test monitoring must be completed once in the first half of the year defined as January 1 through June 30 and once in the second half defined as July 1 through December 31. If refinery turnaround is conducted in a given year, WET monitoring must be conducted concurrently.

1.2.3 Effluent Limitations and Requirements for Storm Water.

In addition to the restrictions set out in Section 1.2.1, storm water discharges and allowable non-storm water discharges from the refinery must comply with the following effluent limitations and monitoring requirements.

1.2.3.1 Storm Water Compliance Monitoring. Storm water compliance under this Permit relies on visual monitoring and observations during semiannual inspections which must be performed by a qualified person as defined in Appendix C.

1.2.3.2 Prohibition of Reportable Quantities and Contaminated Storm Water. Storm water discharges with reportable quantities of petroleum hydrocarbon (sheen), other hazardous substances, or discharges that exceed water quality criteria are prohibited (See Section 3.4.1.1). If a sheen has been reported, or a spill has occurred, in a secondary containment area the contaminated water cannot be discharged as storm water. Contaminated SCA water must be treated in the RWTS and discharged through Outfall 001. The permittee must verify by confirmation sampling that the affected SCA water does not exceed water quality for TAH and TAqH prior to reinitiating a storm water discharge from that SCA after observation of a sheen or spill.

1.2.3.3 Storm Water Pollution Prevention Plan Requirement. To prevent storm water runoff from coming into contact with sources of pollution, the permittee must develop and implement a SWPPP (Section 3.4) composed of a series of standard operating procedures, materials management practices, and structural and non-structural pollutant control measures. The SWPPP satisfies the specific BMPs for the discharges of storm water.

1.3 Additional Effluent Monitoring

1.3.1 The permittee shall conduct additional effluent monitoring of pollutants required under individual permit application Form 2C during the permit cycle and include the results with the application for reissuance. Specifically, the permittee must collect characterization data for the cooling water waste stream that may be used to inform future permit decisions during the next reissuance of this Permit

1.3.2 The permittee has the option of taking more frequent samples than required under this Permit, or DEC may require collection of additional samples through a request for information per CWA 308. These additional samples can be used for averaging if they are conducted using the Department approved test methods (generally found in 18 AAC 70 and 40 CFR 136 [adopted by reference in 18 AAC 83.010], and if the method detection limits are less than the effluent limitations (i.e., sufficiently sensitive methods are used). All data collected during the permit term must be provided to the Department with the next application for reissuance.

1.4 Whole Effluent Toxicity Monitoring

The permittee must conduct chronic WET testing on effluent collected from Outfall 001 per this section.

1.4.1 Test Species and Methods.

The permittee is required to conduct chronic WET testing twice per year on one vertebrate and one invertebrate species. Initially, the permittee must conduct the WET testing to screen for the most sensitive invertebrate species in Section 1.4.1.2. The most sensitive invertebrate species must be approved by DEC in writing for use in subsequent chronic WET tests.

1.4.1.1 Vertebrate (survival and growth). *Atherinops affinis* (topsmelt). In the event that topsmelt is not available, *Menidia beryllina* (inland silverside) may be used as a substitute. The permittee shall document the use of substitute species in the DMR for the testing.

1.4.1.2 Invertebrate. For larval development tests, the permittee must use bivalve species *Crassostrea gigas* (Pacific Oyster) or *Mytilus sp*. (mussel) and *Americamysis bahia* (formally *Mysidopsis bahia*, mysid shrimp) for survival and growth. Due to seasonal variability, testing may be performed during reliable spawning periods (e.g., December through February for mussels and June through August for oysters).

1.4.2 Monitoring Frequency.

Monitoring shall be conducted semiannually and no less than 120 days between sample dates. If refinery turnaround is conducted during a given year, monitoring must be conducted while turnaround waste is being treated in the RWTS and will be counted as one of the two required semiannual monitoring events.

1.4.3 Procedures.

The permittee must conduct chronic WET testing using the following procedures.

1.4.3.1 The presence of chronic toxicity must be estimated as specified in EPA Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition (EPA-821-R-02-014). For the bivalve species, chronic toxicity must be estimated as specified in Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Water to West Coast Marine and Estuarine Organisms (EPA/600/R-95/136). The WET testing will determine the effect concentration (EC_{25}) point estimate of the effluent concentration that would cause a 25-percent (%) reduction in normal embryo development for the bivalves or in survival for fish and/or mysid shrimp. The WET testing will also determine the inhibition concentration (IC_{25}) point estimate of the effluent concentration that would cause a 25-% reduction in the growth of the fish and/or mysid shrimp.

1.4.3.2 Results must be reported on the DMR using TU_c, where $TU_c = 100/EC_{25}$ or $100/IC_{25}$. The reported EC_{25} or IC_{25} must be the lowest point estimate calculated for the applicable survival, growth or normal embryo development endpoints.

1.4.3.3 The permittee must report the no observed effect concentrations (NOECs) in the full WET test report. DEC may compare this information with the IC_{25} during reissuance of this Permit.

1.4.3.4 Although acute WET testing is not required, the permittee must provide an estimate of acute toxicity based on observations of mortality when appropriate (e.g., vertebrates). Acute toxicity estimates, if available, must be documented in the full report.

1.4.3.5 The chronic toxicity trigger is defined as toxicity exceeding 95 TUc corresponding to critical dilution of 1.0 percent (%) effluent.

1.4.3.6 A series of at least five dilutions including the critical dilution (1.0 %) and a control must be tested. The recommended initial dilution series to screen for toxicity is 1.0, 3.125, 6.25, 12.5, 25, 50, and 75% (or maximum hypersaline dilution per test method) along with a control of dilution water (0% effluent). In subsequent tests, the dilution series should be modified to bracket toxicity end points observed during previous tests. DEC may provide written direction to modify the previous dilution series or the permittee may request written approval from DEC to modify the dilution series based on previous test results.

1.4.3.7 WET sample holding times are established at 36 hours and samples must not exceed a hold time of 72 hours. The permittee must document the conditions that resulted in the need for the holding time to exceed 36 hours and the potential effect on the test results.

1.4.3.8 In addition to those quality assurance measures specified in the methodology, the following quality assurance procedures must be followed:

1.4.3.8.1 If organisms are not cultured by the testing laboratory, concurrent testing with reference toxicants must be conducted, unless the test organism supplier provides control chart data from at least the previous five months of reference toxicant testing. Where organisms are cultured by the testing laboratory, monthly reference toxicant testing is sufficient.

1.4.3.8.2 If either of the reference toxicant tests or the effluent tests does not meet all test acceptability criteria as specified in the test methods manual, then the permittee shall re-sample and re-test as soon as possible.

1.4.3.8.3 Control and dilution water should be receiving water, or salinity adjusted lab water. If the dilution water used is different from the culture water, a second control, using culture water must also be used.

1.4.4 Accelerated Testing.

1.4.4.1 Initial investigation. If the toxicity trigger in Section 1.4.3.5 is exceeded during a test of either species and the permittee demonstrates through an evaluation of facility operations that the cause of an exceedance is known and corrective actions have been implemented, one accelerated test for each affected species must be conducted within two weeks of receipt of the test results indicating and exceedance of the trigger. If toxicity exceeding the chronic WET trigger in Section 1.4.3.5 is detected during the one additional test after the facility evaluation, then the Toxicity Reduction Evaluation (TRE) requirements in Section 1.4.5 shall apply, or

1.4.4.2 If chronic WET is detected above the triggers specified in Section 1.4.3.5 and no initial investigation is conducted or no cause is determined by an initial investigation, then the permittee must conduct two biweekly (every two weeks) tests over a four week period. This accelerated testing must be initiated within two weeks of receipt of the test results indicating an exceedance of the trigger.

1.4.4.3 The permittee must notify DEC of the exceedance in writing within two weeks of receipt of the test results. The notification must include the following information:

- A status report on any actions required by the permit, with a schedule for actions not yet completed;
- A description of any additional actions the permittee has taken or will take to investigate and correct the cause(s) of the toxicity, and;
- Where no actions have been taken, a discussion of the reasons for taking no action.

1.4.4.4 Tests performed as part of accelerated testing are not counted as part of the normal testing frequency. If the single accelerated test in Section 1.4.4.1 does not exceed the trigger, the permittee may resume the normal WET testing frequency. If neither of the two accelerated tests in 1.4.4.2 exceed the toxicity trigger in Section 1.4.3.5, the permittee may resume the normal WET testing frequency. However, if any of the accelerated tests in 1.4.4.1 or 1.4.4.2 exceed the chronic WET trigger, then the TRE requirements of Section 1.4.5, shall apply.

1.4.5 Toxicity Reduction Evaluation and Toxicity Identification Evaluation.

1.4.5.1 If the chronic WET trigger is exceeded during accelerated testing under Section 1.4.4.2, the permittee must initiate a TRE in accordance with Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations (TREs) (EPA/600-2-88/070, April 1989) within two weeks of the receipt of the test results showing an exceedance. At a minimum, the TRE must include:

- Further actions to investigate and identify the cause of toxicity;
- Actions the permittee will take to mitigate the impact of the discharge and to prevent recurrence of toxicity;
- A schedule for these actions; and
- If a TRE is initiated, and both species are affected (if both are tested simultaneously), only the more sensitive of the two species, as shown by the initial failing test and accelerated testing, needs to be used to conduct the TRE.

1.4.5.2 The permittee may initiate a Toxicity Identification Evaluation (TIE) as part of the TRE process. Any TIE must be performed in accordance with EPA guidance manuals: Marine Toxicity Identification Evaluation (TIE): Phase 1 Guidance Document (EPA/600/R-096-054), 1996); Toxicity Identification Evaluation: Characterization of Chronically Toxic Effluents, Phase I (EPA/600/6-91/005F, 1992); Methods for Aquatic Toxicity Identification Evaluations Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA/600/R-92/080, 1993); Methods for Aquatic Toxicity Identification Evaluations, Phase III: Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity (EPA-600/R-92/081, 1993).

1.4.6 Reporting.

1.4.6.1 The permittee shall submit chronic WET test results in a toxicity test report with the DMR by the 28th of the month following sample collection.

1.4.6.2 The report of results shall include all relevant information outlined in Section 10. Report Preparation in the U.S. EPA Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms, Third Edition (EPA-821-R-02-014).

1.4.6.3 In addition to toxicity test results, the permittee shall report:

- The date and time of sample collection and initiation of each test,
- Facility production rate during sampling event,
- The flow rate at the time of sample collection, and
- A list of corrosion inhibitors, biocides, algaecides, or other additives being used by facility that could potentially be in the RWTS effluent during the 30-day period preceding sampling.

2.0 MIXING ZONES

2.1 Parameters Authorized

Acute and chronic mixing zones are authorized for Outfall 001. The authorized parameters for the acute and chronic mixing zones are summarized below:

Chronic Only Parameters	Acute and Chronic Parameters
pH	Copper
TAH	Ammonia
TAqH	TRC
Undissociated Hydrogen Sulfide	Arsenic
Phenol	Cyanide
Manganese	
Nickel	
Mercury	
WET	

2.2 Mixing Zone Sizes, Orientations, and Dilution Factors

Both the acute and chronic mixing zones are rectangular in shape with the water surface area centered on Outfall 001 and aligned with the long axis parallel to the shoreline. The acute and chronic mixing zones extend from the seafloor to the sea surface and have the following dilution factors and aerial dimensions centered around the outfall port.

2.2.1 The acute mixing zone has a length of 128 meters (64 meters in each current direction from Outfall 001), a width of 1 meter, and an associated dilution factor of 50.

2.2.2 The chronic mixing zone has a length of 245 meters (122.5 meters in each current direction from Outfall 001), a width of 6 meters and an associated dilution factor of 95.

3.0 SPECIAL CONDITIONS

3.1 Quality Assurance Project Plan

3.1.1 The permittee shall develop a QAPP for all monitoring required by this Permit. The QAPP must be designed to assist in planning for the collection and analysis of effluent and receiving water samples in support of this Permit and to help explain data anomalies whenever they occur. An existing QAPP may be modified or a generic DEC Wastewater Treatment Facility QAPP is available from DEC that can be supplemented with facility-specific components to comply with this requirement.

3.1.2 The permittee shall submit a revised QAPP to DEC for administrative records within 120 days of the effective date of this Permit.

3.1.3 Throughout all sample collection and analysis activities, the permittee shall use DEC-approved quality assurance and quality control (QA/QC) procedures and chain-of-custody procedures, as described in the Requirements for Quality Assurance Project Plans (EPA/QA/R-5) and Guidance for Quality Assurance Project Plans (EPA/QA/G-5). The QAPP must be prepared in the format specified in these documents and, at a minimum, include:

3.1.3.1 Details on number of samples, type of sample containers, preservation of samples, holding times, analytical methods, analytical detection and quantification limits for each target compound, type and number of quality assurance field samples, precision and accuracy requirements, sample preparation requirements, sample shipping methods, and laboratory data delivery requirements;

3.1.3.2 Maps indicating the location of each sampling point;

3.1.3.3 Qualification and training of personnel; and

3.1.3.4 Name, address, and telephone number of all laboratories used by or proposed to be used by the permittee.

3.1.4 A Copy of the QAPP must be kept on site and made available to DEC upon request. Electronic storage of documents can be used so long as they are accessible when a DEC inspector conducts an onsite inspection.

3.1.5 The permittee must develop a facility-specific QAPP that addresses permit-specific monitoring requirements such as composite sampling for 2,3,7,8 TCDD in treated reformer catalyst regeneration wastewater per Section 3.1.6 and WET sample collection that accounts for the timing (i.e., detention time in the RWTS) of turnaround wastewater in the effluent.

3.1.6 The permittee must establish sampling and analytical procedures in the QAPP specifically for monitoring 2,3,7,8 TCDD in the treated reformer catalyst regeneration effluent. At minimum, the QAPP must outline flow measurement (flow meter, measured volume, etc.), composite sampling methods, and data reporting procedures. Composite sample methods must include at least eight discrete aliquots of not less than 100 milliliter (ml) each collected in a manner that results in a time-proportioned composite sample and generally follows the most recent edition of Standard Methods for the Examination of Water and Wastewater. Catalyst regeneration samples must be analyzed for dioxin/furan congeners using EPA Method 1613. Concentrations of all individual congeners analyzed using this method (tetra- through octa-chlorinated dioxins and furans) must be reported and if the result is below the method detection limit, the permittee must report the concentration as "less than" the method detection limit value and use the value in reporting calculations. The permittee shall update the QAPP whenever sample collection, sample analysis, or other procedures addressed in the QAPP are modified.

3.2 Reformer Catalyst Regeneration Monitoring and Reporting

The permittee must monitor for dioxin (2,3,7,8 TCDD) in the effluent from the pretreatment system for reformer catalyst regeneration and submit a letter report to DEC by January 31st of each year even if no regeneration occurred during the previous year. The applicant must also submit a monitoring summary for 2,3,7,8 TCDD with the next application for reissuance. The permittee must develop sampling and analytical methods in the QAPP per Section 3.1.5. The final discharge concentration of 2,3,7,8 TCDD must be determined and reported as follows:

Discharge = C*(Q1/Q2)

Where,

C = 2,3,7,8-TCDD is the concentration in composite sample from the regeneration waste stream;

Q1 = flow of the reformer catalyst in regeneration waste stream; and

Q2 = total flow of the refinery final effluent

3.3 Best Management Practices (BMP) Plan

3.3.1 Purpose. Through implementation of the BMP Plan the permittee shall prevent or minimize the generation and the potential for release of pollutants from the refinery to waters of the U.S. through normal operations, dewatering SCAs, and periodic maintenance activities (e.g., refinery turnaround).

3.3.2 Development and Implementation Schedule. The permittee shall develop and implement a BMP Plan which achieves the objectives and the specific requirements listed below. The permittee shall submit the initial BMP Plan to the Department for administrative files within 120 days of the effective date of this Permit. The permittee must submit written certification that the BMP Plan has been reviewed and revised, if appropriate, by January 31st each year per Section 3.3.7.2. An existing BMP Plan may be modified for compliance with this Part.

3.3.3 Objectives. The permittee shall develop and amend the BMP Plan consistent with the following objectives for the control of pollutants.

3.3.3.1 The number and quantity of pollutants and the toxicity of effluent generated, discharged, or potentially discharged at the facility must be minimized by the permittee to the extent feasible by managing each waste stream in the most appropriate manner.

3.3.3.2 Under the BMP Plan and especially within any standard operating procedures in the BMP Plan, the permittee shall ensure proper water management, and operation and maintenance of the RWTS and reformer catalyst regeneration wastewater treatment system. BMP Plan elements must be developed in accordance with good engineering practices.

3.3.3.3 Each facility component or system must be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to lands and waters of the U.S. due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc. The examination must include all normal operations and ancillary activities including material storage areas, storm water, in-plant transfer, material handling and process handling areas, loading or unloading operations, spillage or leaks, sludge and waste disposal, or drainage from raw material storage.

3.3.4 Plan Development Guidelines.

The BMP Plan must be consistent with the objectives above and the general guidance contained in Guidance Manual for Developing Best Management Practices (EPA 833-B-93-004, October 1993) or any subsequent revision to these guidance documents.

3.3.5 Plan Components.

The BMP Plan must include, at a minimum, the following items:

3.3.5.1 Statement of BMP Policy. The BMP Plan must include a statement of management commitment to provide the necessary financial, staff, equipment, and training resources to develop and implement the BMP Plan on a continuing basis.

3.3.5.2 The BMP Plan must establish a BMP Committee responsible for developing, implementing, and maintaining the BMP Plan. Specify the structure, functions, and procedures of the BMP Committee.

3.3.5.3 Description of potential pollutant sources.

3.3.5.4 Risk identification and assessment.

3.3.5.5 Standard operating procedures to achieve the above objectives and specific BMPs per Section 3.3.6.

3.3.5.6 The BMP Plan must establish procedures for documenting and reporting BMP incidents. The reports must include a description of the circumstances leading to the incident, corrective actions taken and recommended changes to operating and maintenance practices to prevent recurrence.

3.3.5.7 Materials compatibility.

3.3.5.8 Good housekeeping.

3.3.5.9 Inspections.

3.3.5.10 Preventative maintenance and repair.

3.3.5.11 Security.

3.3.5.12 Employee training.

3.3.5.13 Record keeping and reporting.

3.3.5.14 Prior evaluation of any planned modifications to the facility to ensure that the requirements of the BMP plan are considered as part of the modifications.

3.3.5.15 Final constructed site plans, drawings, and maps (including detailed storm water outfall/culvert configurations).

3.3.6 Specific BMPs.

The BMP Plan must establish BMPs or other measures to achieve the objectives under Part 3.3.3 which ensure that the following specific requirements are met:

3.3.6.1 The periodic shutdown and maintenance activities associated with refinery turnaround has the potential to result in permit limit exceedances unless consideration is given to appropriate handling of high-strength or off-specification wastewater that is treated and disposed in the RWTS. The permittee must develop and implement BMPs to help ensure compliance with permit limits and conditions during this essential activity. BMPs are expected to include, but not be limited to: storage of high-strength or off-specification wastewater and introduction into the RWTS at a rate that will not organically or hydraulically overload treatment units; pretreatment to remove constituents that the RWTS cannot treat (e.g., pretreatment for 2,3,7,8 TCDD); prioritization and sequencing of processing multiple turnaround waste through the RWTS; and alternative disposal of waste that is incompatible with the RWTS treatment capabilities or permit conditions.

3.3.6.2 During the summer, the polishing ponds in the RWTS that provides final treatment during other times of the year becomes impacted by algal blooms that increase TSS and pH. The control of pH by acid injection has become necessary to ensure compliance with permit limits. The permittee must develop BMPs that address the seasonal control of TSS and pH including SOPs that help ensure these control measures themselves do not cause out of compliance discharges (e.g., over injection of acid).

3.3.6.3 This Permit allows the treatment and discharge of contaminated SCA water through the RWTS and the discharge of uncontaminated SCA water as storm water. This Permit requires development of specific BMPs to address procedures to ensure contaminated SCA water is routed to the RWTS and not mistakenly discharged to the storm water conveyance system. Because the storm water conveyance system is implicated, this BMP has a direct overlap with the SWPPP in Section 3.4.

3.3.6.4 Solids Handling: Solids, sludge, or other pollutants removed in the course of treatment or control of water and wastewaters must be disposed of in a manner to prevent any pollutant from such materials from entering waters of the U.S.

3.3.6.5 Ensure proper management of solid and hazardous waste in accordance with regulations promulgated under the Resource Conservation and Recovery Act (RCRA). Management practices required under RCRA regulations must be referenced in the BMP Plan.

3.3.7 Review and Recertification.

The BMP must be reviewed and recertified as follows:

3.3.7.1 Annual review by the plant manager and BMP Committee.

3.3.7.2 Certified statement the above reviews were completed and the BMP Plan fulfills the requirements set forth in this Permit. The statement must be certified by the dated signatures of each BMP Committee member. The statement must be submitted to DEC on or before January 31st of each year of operation under this Permit after the initial BMP submittal per Section 3.3.2.

3.3.8 Documentation.

The permittee must maintain a copy of the BMP Plan at the facility and make it available to DEC or an authorized representative upon request. Electronic storage of documents can be used so long as they are accessible when a DEC inspector conducts an onsite inspection.

3.3.9 BMP Plan Modification.

3.3.9.1 The permittee must amend the BMP Plan whenever a change in the facility or in the operation of the facility materially increases the generation of pollutants or their release or potential release to receiving waters.

3.3.9.2 The permittee must amend the BMP Plan whenever the plan is found to be ineffective in achieving the general objective of preventing and minimizing the generation and the potential for the release of pollutants from the facility to waters of the U.S. Any changes to the BMP Plan must be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan must be reported to DEC with the annual certification required under Part 3.3.7.2.

3.4 Storm Water Pollution Prevention Plan Requirements

This Permit requires development of a SWPPP to address specific storm water control measures to prevent contaminated storm water (runoff) from being discharged with uncontaminated storm water at the refinery. The permittee must develop a SWPPP that includes adequate details for each specific control measure (e.g., site maps, snow storage areas, SCAs, potential contaminant sources identified, control measures, etc.) as described in the following sections.

3.4.1 SWPPP Contents.

The SWPPP must be consistent with EPA Guidance document, *Developing Your Stormwater Pollution Prevention Plan – A Guide for Industrial Operators* (February 2009, EPA 833-B-09-002) or any subsequent revision of the guidance document *http://www.epa.gov/npdes/pubs/industrial_swppp_guide.pdf* . The following must be incorporated within the SWPPP and must be developed by a qualified person.

3.4.1.1 The SWPPP must include a narrative that provides descriptions of the following items:

- BMP measures to prevent or clean up reportable quantity releases (Contaminated storm water is storm water associated with a discharge

of a reportable quantity for which notification is or was required per 40 CFR 117.21, 40 CFR 302.6, or 40 CFR 110.6 or any storm water that contributes to a violation of a water quality standard [40 CFR 122.26(c)(1)(iii)]);

- Vehicle and equipment storage, cleaning, and maintenance areas;
- Snow handling procedures and erosion controls; and
- Any provisions necessary to meet the BMP Plan requirements (Section 3.3) of this Permit.

3.4.1.2 Description, location, and sequence of activities, control measures, and stabilization measures;

3.4.1.3 Documentation of confirmation sampling of TAH and TAqH to demonstrate an individual SCA is no longer contaminated after observation of sheen or a spill (See Section 1.2.3.2).

3.4.1.4 Documentation of maintenance and repairs of control measures, including date(s) of regular maintenance, date(s) of discovery of areas in need of repair/maintenance, and date(s) that the control measure(s) returned to full function;

3.4.1.5 Manufacturer information (i.e. Safety Data Sheet, manufacturer and/or supplier test results, or installation instructions);

3.4.1.6 Description of any corrective action taken at the facility, including the event that caused the need for corrective action and dates when problems were discovered and modifications occurred;

3.4.1.7 Records of employee training, including the date(s) training was received; and

3.4.1.8 Copies of biannual inspection reports, non-compliance notices, annual SWPPP certifications, monitoring reports, and annual reports.

3.4.2 SWPPP Implementation and Administrative Requirements

3.4.2.1 SWPPP Development and Implementation. The permittee shall develop and implement a SWPPP which achieves the objectives and the specific requirements per Section 3.4.1. The permittee shall submit the initial SWPPP to the Department for administrative records within 120 days of the effective date of this Permit. An existing SWPPP may be modified for compliance with this Part.

3.4.2.2 SWPPP Modifications. The permittee must update the SWPPP and site maps with any relevant new information, within seven calendar days of a response to any following triggering conditions:

3.4.2.2.1 Changes in facility or operation of facility which materially increases the generation of pollutants or their release or potential release to surface water.

3.4.2.2.2 Changes to control measures, good housekeeping measures, or other activities that render the exiting SWPPP obsolete.

3.4.2.2.3 Changes made in response to corrective actions, or maintenance procedures.

3.4.2.2.4 An inspection or investigation reveal changes are necessary to comply with this Permit.

3.4.2.2.5 The permittee must revise its SWPPP to reflect the new maintenance procedures and include documentation of the corrective action to return to full compliance. The permittee must maintain a log showing the dates of all SWPPP modifications, including name of the person authorizing each change and a brief summary.

3.4.2.3 Annual Certification. Permittee must submit written certification that the SWPPP has been reviewed and revised as necessary and is ready for implementation by January 31st of each year.

3.4.2.4 SWPPP Documentation and Availability. Copies of this Permit and a log of SWPPP modifications must be included with the SWPPP. A permittee must make a copy of the SWPPP and documentation available to DEC upon request, for review or copying, during any on-site inspection. Electronic storage of documents can be used so long as they are accessible when a DEC inspector conducts an onsite inspection. A copy of the SWPPP must be kept at the facility at all times. The SWPPP must identify any alternative off-site location for available access if there is a seasonal shut down for a facility. The SWPPP must be returned to the facility once the shutdown is over.

3.4.2.5 Inspection Requirements. Requirements for reporting results of storm water monitoring inspections are specified at 40 CFR 122.44(i)(4). Specifically this Permit requires:

3.4.2.5.1 Biannual inspection of the facility site. One inspection should be conducted prior to breakup to assess whether there are any areas which may contribute to storm water discharges associated with the industrial facility or activity and could be addressed with BMPs to minimize contact with contamination sources. The second inspection should be conducted during or after the breakup period is over to assess whether there are any areas which contributed to storm water discharge associated with the industrial facility or activity that were unanticipated and unaddressed by the SWPPP. The SWPPP should be modified to include the necessary practices to minimize future contact or contamination. Biannual inspections must be reported to the Department with other annual reporting requirements (Section 3.6).

3.4.2.5.2 Maintain inspection reports and compliance certification for a period of three years.

3.4.2.5.3 Certifications must be signed by established signatory authority per 40 CFR 122.22; and for inactive sites where annual inspections are impracticable, or otherwise unwarranted, a certification once every three years that the facility is in compliance with this Permit or alternative requirements.

3.5 Receiving Water Sampling and Analysis Plan (SAP)

The permittee is required to conduct sampling and analysis of selected parameters in the Outfall 001 effluent and receiving water in the vicinity of the discharge to support future permit development (e.g., reasonable potential analysis and water quality-based effluent limits). The permittee must conduct four sampling events during this Permit term and submit the results with the next application for reissuance. The receiving water analysis must include temperature, salinity, pH and certain water quality parameters. The list of parameters to be sampled and analyzed are based on expected data needs to support water quality objectives during the next reissuance of this Permit. Not all parameters listed must be collected during each event if the parameter is demonstrated to not be present (i.e., less than an appropriate method detection limit) in the receiving water during previous sample events. These parameters include, but may not be limited to, the following:

- Ammonia
- Arsenic
- Copper
- Manganese
- Mercury
- TAH
- TAqH
- Undissociated Hydrogen Sulfide
- Phenol

3.5.1 SAP Goals and Requirements.

3.5.1.1 A SAP will be submitted for Department review and approval that identifies proposed sample locations, predicted tidal conditions (ebb and flood), sample collection and analytical methods, and schedule for each sampling event.

3.5.1.2 Effluent water samples will be grab samples collected at the Outfall 001 compliance sampling location on the same day as receiving water samples are collected.

3.5.1.3 Receiving water samples will be grab samples collected during ebb and flood tides at locations where the effluent and receiving water are completely mixed beyond the chronic mixing zone.

3.5.1.4 The sampling program shall use appropriate sample collection procedures, sample preservation, and testing methods to ensure samples are accurate and represent the characteristics of the sampled waters.

3.5.1.5 Sample schedules should attempt to account for seasonal variability in the receiving water. Each monitoring event shall be conducted in a different season based on a schedule proposed in the SAP and approved by the Department. The receiving water sample schedule may be coordinated with the schedule requirements in Section 1.3.1.

3.5.2 SAP Submittals.

3.5.2.1 A SAP identifying proposed sample schedules, locations, collection procedures, sample preservation and testing methods shall be submitted for review and approval by Department permitting staff (APDES Oil & Gas Permitting Section) at least 90 days in advance of the initial testing event.

3.5.2.2 The permittee must contact DEC upon receipt of unusual results that may impact reissuance of this Permit. A summary report SAP must be provided to DEC with an application for reissuance within 180 days prior to Permit expiration.

3.6 Annual Reporting Requirements for Special Conditions

3.6.1 SWPPP certification statement per Section 3.4.2.3 and a BMP Plan certification statement per Section 3.3.7.2 must be submitted annually to the Department by January 31st of each year.

3.6.2 Certification of biannual SWPPP inspection per Section 3.4.2.5.1 must be submitted annually to the Department by January 31st of each year.

3.6.3 An inventory of the types and amounts of biocides, herbicides, pesticides, etc. that have been used during the year must be submitted to the Department by January 31st of each year, as applicable.

3.6.4 Results of monitoring for 2,3,7,8 TCDD in the treated reformer catalyst regeneration effluent per Section 3.2 must be submitted annually to the Department by January 31st of each year, as applicable.

APPENDIX A

STANDARD CONDITIONS

APDES PERMIT

NONDOMESTIC DISCHARGES

September 2011

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Appendix A of the permit contains standard regulatory language that must be included in all APDES permits. These requirements are based on the regulations and cannot be challenged in the context of an individual APDES permit action. The standard regulatory language covers requirements such as monitoring, recording, reporting requirements, compliance responsibilities, and other general requirements. Appendix A, Standard Conditions is an integral and enforceable part of the permit. Failure to comply with a Standard Condition in this Appendix constitutes a violation of the permit and is subject to enforcement.

1.0 Standard Conditions Applicable to All Permits

1.1 Contact Information and Addresses

1.1.1 Permitting Program

Documents, reports, and plans required under the permit and Appendix A are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Wastewater Discharge Authorization Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone (907) 269-6285
Fax (907) 269-3487
Email: DEC.Water.WQPermit@alaska.gov

1.1.2 Compliance and Enforcement Program

Documents and reports required under the permit and Appendix A relating to compliance are to be sent to the following address:

State of Alaska
Department of Environmental Conservation
Division of Water
Compliance and Enforcement Program
555 Cordova Street
Anchorage, Alaska 99501
Telephone Nationwide (877) 569-4114
Anchorage Area / International (907) 269-4114
Fax (907) 269-4604
Email: dec-wqreporting@alaska.gov

1.2 Duty to Comply

A permittee shall comply with all conditions of the permittee's APDES permit. Any permit noncompliance constitutes a violation of 33 U.S.C 1251-1387 (Clean Water Act) and state law and is grounds for enforcement action including termination, revocation and reissuance, or modification of a permit, or denial of a permit renewal application. A permittee shall comply with effluent standards or prohibitions established under 33 U.S.C. 1317(a) for toxic pollutants within the time provided in the regulations that establish those effluent standards or prohibitions even if the permit has not yet been modified to incorporate the requirement.

1.3 Duty to Reapply

If a permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee must apply for and obtain a new permit. In accordance with 18 AAC 83.105(b), a permittee with a currently effective permit shall reapply by submitting a new application at least 180 days before the existing permit expires, unless the Department has granted the permittee permission to submit an application on a later date. However, the Department will not grant permission for an application to be submitted after the expiration date of the existing permit.

1.4 Need to Halt or Reduce Activity Not a Defense

In an enforcement action, a permittee may not assert as a defense that compliance with the conditions of the permit would have made it necessary for the permittee to halt or reduce the permitted activity.

1.5 Duty to Mitigate

A permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit that has a reasonable likelihood of adversely affecting human health or the environment.

1.6 Proper Operation and Maintenance

1.6.1 A permittee shall at all times properly operate and maintain all facilities and systems of treatment and control and related appurtenances that the permittee installs or uses to achieve compliance with the conditions of the permit. The permittee's duty to operate and maintain properly includes using adequate laboratory controls and appropriate quality assurance procedures. However, a permittee is not required to operate back-up or auxiliary facilities or similar systems that a permittee installs unless operation of those facilities is necessary to achieve compliance with the conditions of the permit.

1.6.2 Operation and maintenance records shall be retained and made available at the site.

1.7 Permit Actions

A permit may be modified, revoked and reissued, or terminated for cause as provided in 18 AAC 83.130. If a permittee files a request to modify, revoke and reissue, or terminate a permit, or gives notice of planned changes or anticipated noncompliance, the filing or notice does not stay any permit condition.

1.8 Property Rights

A permit does not convey any property rights or exclusive privilege.

1.9 Duty to Provide Information

A permittee shall, within a reasonable time, provide to the Department any information that the Department requests to determine whether a permittee is in compliance with the permit, or whether cause exists to modify, revoke and reissue, or terminate the permit. A permittee shall also provide to the Department, upon request, copies of any records the permittee is required to keep under the permit.

1.10 Inspection and Entry

A permittee shall allow the Department, or an authorized representative, including a contractor acting as a representative of the Department, at reasonable times and on presentation of credentials establishing authority and any other documents required by law, to:

1.10.1 Enter the premises where a permittee's regulated facility or activity is located or conducted, or where permit conditions require records to be kept;

1.10.2 Have access to and copy any records that permit conditions require the permittee to keep;

1.10.3 Inspect any facilities, equipment, including monitoring and control equipment, practices, or operations regulated or required under a permit; and

1.10.4 Sample or monitor any substances or parameters at any location for the purpose of assuring permit compliance or as otherwise authorized by 33 U.S.C. 1251-1387 (Clean Water Act).

1.11 Monitoring and Records

A permittee must comply with the following monitoring and recordkeeping conditions:

1.11.1 Samples and measurements taken for the purpose of monitoring must be representative of the monitored activity.

1.11.2 The permittee shall retain records in Alaska of all monitoring information for at least three years, or longer at the Department's request at any time, from the date of the sample, measurement, report, or application. Monitoring records required to be kept include:

1.11.2.1 All calibration and maintenance records,

1.11.2.2 All original strip chart recordings or other forms of data approved by the Department for continuous monitoring instrumentation,

1.11.2.3 All reports required by a permit,

1.11.2.4 Records of all data used to complete the application for a permit,

1.11.2.5 Field logbooks or visual monitoring logbooks,

1.11.2.6 Quality assurance chain of custody forms,

1.11.2.7 Copies of discharge monitoring reports, and

1.11.2.8 A copy of this APDES permit.

1.11.3 Records of monitoring information must include:

1.11.3.1 The date, exact place, and time of any sampling or measurement;

1.11.3.2 The name(s) of any individual(s) who performed the sampling or measurement(s);

1.11.3.3 The date(s) and time any analysis was performed;

1.11.3.4 The name(s) of any individual(s) who performed any analysis;

1.11.3.5 Any analytical technique or method used; and

1.11.3.6 The results of the analysis.

1.11.4 Monitoring Procedures

Analyses of pollutants must be conducted using test procedures approved under 40 CFR Part 136, adopted by reference at 18 AAC 83.010, for pollutants with approved test procedures, and using test procedures specified in the permit for pollutants without approved methods.

1.12 Signature Requirement and Penalties

1.12.1 Any application, report, or information submitted to the Department in compliance with a permit requirement must be signed and certified in accordance with 18 AAC 83.385. Any person who knowingly makes any false material statement, representation, or certification in any application, record, report, or other document filed or required to be maintained under a permit, or who knowingly falsifies, tampers with, or renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be subject to penalties under 33 U.S.C. 1319(c)(4), AS 12.55.035(c)(1)(B), (c)(2) and (c)(3), and AS 46.03.790(g).

1.12.2 In accordance with 18 AAC 83.385, an APDES permit application must be signed as follows:

1.12.2.1 For a corporation, a responsible corporate officer shall sign the application; in this subsection, a responsible corporate officer means:

1.12.2.1.1 A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation; or

1.12.2.1.2 The manager of one of more manufacturing, production, or operating facilities, if

1.12.2.1.2.1 The manager is authorized to make management decisions that govern the operation of the regulated facility, including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental statutes and regulations;

1.12.2.1.2.2 The manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and

1.12.2.1.2.3 Authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

1.12.2.2 For a partnership or sole proprietorship, by the general partner or the proprietor, respectively, shall sign the application

1.12.2.3 For a municipality, state, federal, or other public agency, either a principal executive officer or ranking elected official shall sign the application; in this subsection, a principal executive officer of an agency means:

1.12.2.3.1 The chief executive officer of the agency; or

1.12.2.3.2 A senior executive officer having responsibility for the overall operations of a principal geographic unit or division of the agency.

1.12.3 Any report required by an APDES permit, and a submittal with any other information requested by the Department, must be signed by a person described in Appendix A, Part 1.12.2, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1.12.3.1 The authorization is made in writing by a person described in Appendix A, Part 1.12.2;

1.12.3.2 The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity, including the position of plant manager, operator of a well or a well field, superintendent, or position of equivalent responsibility; or an individual or position having overall responsibility for environmental matters for the company; and

1.12.3.3 The written authorization is submitted to the Department to the Permitting Program address in Appendix A, Part 1.1.1.

1.12.4 If an authorization under Appendix A, Part 1.12.3 is no longer effective because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of Appendix A, Part 1.12.3 must be submitted to the Department before or together with any report, information, or application to be signed by an authorized representative.

1.12.5 Any person signing a document under Appendix A, Part 1.12.2 or Part 1.12.3 shall certify as follows:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

1.13 Proprietary or Confidential Information

1.13.1 A permit applicant or permittee may assert a claim of confidentiality for proprietary or confidential business information by stamping the words “confidential business information” on each page of a submission containing proprietary or confidential business information. The Department will treat the stamped submissions as confidential if the information satisfies the test in 40 CFR §2.208, adopted by reference at 18 AAC 83.010, and is not otherwise required to be made public by state law.

1.13.2 A claim of confidentiality under Appendix A, Part 1.13.1 may not be asserted for the name and address of any permit applicant or permittee, a permit application, a permit, effluent data, sewage sludge data, and information required by APDES or NPDES application forms provided by the Department, whether submitted on the forms themselves or in any attachments used to supply information required by the forms.

1.13.3 A permittee’s claim of confidentiality authorized under Appendix A, Part 1.13.1 is not waived if the Department provides the proprietary or confidential business information to the EPA or to other agencies participating in the permitting process. The Department will supply any information obtained or used in the administration of the state APDES program to the EPA upon request under 40 CFR §123.41, as revised as of July 1, 2005. When providing information submitted to the Department with a claim of confidentiality to the EPA, the Department will notify the EPA of the confidentiality claim. If the Department provides the EPA information that is not claimed to be confidential, the EPA may make the information available to the public without further notice.

1.14 Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any action or relieve a permittee

from any responsibilities, liabilities, or penalties to which the permittee is or may be subject to under state laws addressing oil and hazardous substances.

1.15 Cultural and Paleontological Resources

If cultural or paleontological resources are discovered because of this disposal activity, work that would disturb such resources is to be stopped, and the Office of History and Archaeology, a Division of Parks and Outdoor Recreation of the Alaska Department of Natural Resources (http://www.dnr.state.ak.us/parks/oha/), is to be notified immediately at (907) 269-8721.

1.16 Fee

A permittee must pay the appropriate permit fee described in 18 AAC 72.

1.17 Other Legal Obligations

This permit does not relieve the permittee from the duty to obtain any other necessary permits from the Department or from other local, state, or federal agencies and to comply with the requirements contained in any such permits. All activities conducted and all plan approvals implemented by the permittee pursuant to the terms of this permit shall comply with all applicable local, state, and federal laws and regulations.

2.0 Special Reporting Obligations

2.1 Planned Changes

2.1.1 The permittee shall give notice to the Department as soon as possible of any planned physical alteration or addition to the permitted facility if:

2.1.1.1 The alteration or addition may make the facility a "new source" under one or more of the criteria in 18 AAC 83.990(44); or

2.1.1.2 The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged if those pollutants are not subject to effluent limitations in the permit or to notification requirements under 18 AAC 83.610.

2.1.2 If the proposed changes are subject to plan review, then the plans must be submitted at least 30 days before implementation of changes (see 18 AAC 15.020 and 18 AAC 72 for plan review requirements). Written approval is not required for an emergency repair or routine maintenance.

2.1.3 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.2 Anticipated Noncompliance

2.2.1 A permittee shall give seven days' notice to the Department before commencing any planned change in the permitted facility or activity that may result in noncompliance with permit requirements.

2.2.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.3 Transfers

2.3.1 A permittee may not transfer a permit for a facility or activity to any person except after notice to the Department in accordance with 18 AAC 83.150. The Department may modify or revoke and reissue the permit to change the name of the permittee and incorporate such other requirements under 33 U.S.C. 1251-1387 (Clean Water Act) or state law.

2.3.2 Written notice must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.4 Compliance Schedules

2.4.1 A permittee must submit progress or compliance reports on interim and final requirements in any compliance schedule of a permit no later than 14 days following the scheduled date of each requirement.

2.4.2 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.5 Corrective Information

2.5.1 If a permittee becomes aware that it failed to submit a relevant fact in a permit application or submitted incorrect information in a permit application or in any report to the Department, the permittee shall promptly submit the relevant fact or the correct information.

2.5.2 Information must be sent to the Permitting Program address in Appendix A, Part 1.1.1.

2.6 Bypass of Treatment Facilities

2.6.1 Prohibition of Bypass

Bypass is prohibited. The Department may take enforcement action against a permittee for any bypass, unless:

2.6.1.1 The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

2.6.1.2 There were no feasible alternatives to the bypass, including use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. However, this condition is not satisfied if the permittee, in the exercise of reasonable engineering judgment, should have installed adequate back-up equipment to prevent a bypass that occurred during normal periods of equipment downtime or preventive maintenance; and

2.6.1.3 The permittee provides notice to the Department of a bypass event in the manner, as appropriate, under Appendix A, Part 2.6.2.

2.6.2 Notice of bypass

2.6.2.1 For an anticipated bypass, the permittee submits notice at least 10 days before the date of the bypass. The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the conditions of Appendix A, Parts 2.6.1.1 and 2.6.1.2.

2.6.2.2 For an unanticipated bypass, the permittee submits 24-hour notice, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting.

2.6.2.3 Written notice must be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

2.6.3 Notwithstanding Appendix A, Part 2.6.1, a permittee may allow a bypass that:

2.6.3.1 Does not cause an effluent limitation to be exceeded, and

2.6.3.2 Is for essential maintenance to assure efficient operation.

2.7 Upset Conditions

2.7.1 In any enforcement action for noncompliance with technology-based permit effluent limitations, a permittee may claim upset as an affirmative defense. A permittee seeking to establish the occurrence of an upset has the burden of proof to show that the requirements of Appendix A, Part 2.7.2 are met.

2.7.2 To establish the affirmative defense of upset, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:

2.7.2.1 An upset occurred and the permittee can identify the cause or causes of the upset;

2.7.2.2 The permitted facility was at the time being properly operated;

2.7.2.3 The permittee submitted 24-hour notice of the upset, as required in 18 AAC 83.410(f) and Appendix A, Part 3.4, Twenty-four Hour Reporting; and

2.7.2.4 The permittee complied with any mitigation measures required under 18 AAC 83.405(e) and Appendix A, Part 1.5, Duty to Mitigate.

2.7.3 Any determination made in administrative review of a claim that noncompliance was caused by upset, before an action for noncompliance is commenced, is not final administrative action subject to judicial review.

2.8 Existing Manufacturing, Commercial, Mining, and Silvicultural Discharges

2.8.1 In addition to the reporting requirements under 18 AAC 83.410, an existing manufacturing, commercial, mining, and silvicultural discharger shall notify the Department as soon as that discharger knows or has reason to believe that any activity has occurred or will occur that would result in:

2.8.1.1 The discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.1.1 One hundred micrograms per liter (100 µg/L);

2.8.1.1.2 Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile, 500 micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol, and one milligram per liter (1 mg/L) for antimony;

2.8.1.1.3 Five times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or

2.8.1.1.4 The level established by the Department in accordance with 18 AAC 83.445.

2.8.1.2 Any discharge, on a non-routine or infrequent basis, of a toxic pollutant that is not limited in the permit, if that discharge will exceed the highest of the following notification levels:

2.8.1.2.1 Five hundred micrograms per liter (500 µg/L);

2.8.1.2.2 One milligram per liter (1 mg/L) for antimony;

2.8.1.2.3 Ten times the maximum concentration value reported for that pollutant in the permit application in accordance with 18 AAC 83.310(c)-(g); or

2.8.1.2.4 The level established by the Department in accordance with 18 AAC 83.445.

3.0 Monitoring, Recording, and Reporting Requirements

3.1 Representative Sampling

A permittee must collect effluent samples from the effluent stream after the last treatment unit before discharge into the receiving waters. Samples and measurements must be representative of the volume and nature of the monitored activity or discharge.

3.2 Reporting of Monitoring Results

At intervals specified in the permit, monitoring results must be reported on the EPA discharge monitoring report (DMR) form, as revised as of March 1999, adopted by reference.

3.2.1 Monitoring results shall be summarized each month on the DMR or an approved equivalent report. The permittee must submit reports monthly postmarked by the 15th day of the following month.

3.2.2 The permittee must sign and certify all DMRs and all other reports in accordance with the requirements of Appendix A, Part 1.12, Signatory Requirements and Penalties. All signed and certified legible original DMRs and all other documents and reports must be submitted to the Department at the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

3.2.3 If, during the period when this permit is effective, the Department makes available electronic reporting, the permittee may, as an alternative to the requirements of Appendix A, Part 3.2.2, submit monthly DMRs electronically by the 15th day of the following month in accordance with guidance provided by the Department. The permittee must certify all DMRs and other reports, in accordance with the requirements of Appendix A, Part 1.12, Signatory Requirements and Penalties. The permittee must retain the legible originals of these documents and make them available to the Department upon request.

3.3 Additional Monitoring by Permittee

If the permittee monitors any pollutant more frequently than the permit requires using test procedures approved in 40 CFR Part 136, adopted by reference at 18 AAC 83.010, or as specified in this permit, the results of that additional monitoring must be included in the calculation and reporting of the data submitted in the DMR required by Appendix A, Part 3.2. All limitations that require averaging of measurements must be calculated using an arithmetic means unless the Department specifies another method in the permit. Upon request by the Department, the permittee must submit the results of any other sampling and monitoring regardless of the test method used.

3.4 Twenty-four Hour Reporting

A permittee shall report any noncompliance event that may endanger health or the environment as follows:

3.4.1 A report must be made:

3.4.1.1 Orally within 24 hours after the permittee becomes aware of the circumstances, and

3.4.1.2 In writing within five days after the permittee becomes aware of the circumstances.

3.4.2 A report must include the following information:

3.4.2.1 A description of the noncompliance and its causes, including the estimated volume or weight and specific details of the noncompliance;

3.4.2.2 The period of noncompliance, including exact dates and times;

3.4.2.3 If the noncompliance has not been corrected, a statement regarding the anticipated time the noncompliance is expected to continue; and

3.4.2.4 Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

3.4.3 An event that must be reported within 24 hours includes:

3.4.3.1 An unanticipated bypass that exceeds any effluent limitation in the permit (see Appendix A, Part 2.6, Bypass of Treatment Facilities).

3.4.3.2 An upset that exceeds any effluent limitation in the permit (see Appendix A, Part 2.7, Upset Conditions).

3.4.3.3 A violation of a maximum daily discharge limitation for any of the pollutants listed in the permit as requiring 24-hour reporting.

3.4.4 The Department may waive the written report on a case-by-case basis for reports under Appendix A, Part 3.4 if the oral report has been received within 24 hours of the permittee becoming aware of the noncompliance event.

3.4.5 The permittee may satisfy the written reporting submission requirements of Appendix A, Part 3.4 by submitting the written report via e-mail, if the following conditions are met:

3.4.5.1 The Noncompliance Notification Form or equivalent form is used to report the noncompliance;

3.4.5.2 The written report includes all the information required under Appendix A, Part 3.4.2;

3.4.5.3 The written report is properly certified and signed in accordance with Appendix A, Parts 1.12.3 and 1.12.5.;

3.4.5.4 The written report is scanned as a PDF (portable document format) document and transmitted to the Department as an attachment to the e-mail; and

3.4.5.5 The permittee retains in the facility file the original signed and certified written report and a printed copy of the conveying email.

3.4.6 The e-mail and PDF written report will satisfy the written report submission requirements of this permit provided the e-mail is received by the Department within five days after the time the permittee becomes aware of the noncompliance event and the e-mail and written report satisfy the criteria of Part 3.4.5. The e-mail address to report noncompliance is: dec-wqreporting@alaska.gov

3.5 Other Noncompliance Reporting

A permittee shall report all instances of noncompliance not required to be reported under Appendix A, Parts 2.4 (Compliance Schedules), 3.3 (Additional Monitoring by Permittee), and 3.4 (Twenty-four Hour Reporting) at the time the permittee submits monitoring reports under Appendix A, Part 3.2 (Reporting of Monitoring Results). A report of noncompliance under this part must contain the information listed in Appendix A, Part 3.4.2 and be sent to the Compliance and Enforcement Program address in Appendix A, Part 1.1.2.

4.0 Penalties for Violations of Permit Conditions

Alaska laws allow the State to pursue both civil and criminal actions concurrently. The following is a summary of Alaska law. Permittees should read the applicable statutes for further substantive and procedural details.

4.1 Civil Action

Under AS 46.03.760(e), a person who violates or causes or permits to be violated a regulation, a lawful order of the Department, or a permit, approval, or acceptance, or term or condition of a permit, approval or acceptance issued under the program authorized by AS 46.03.020 (12) is liable, in a civil action, to the State for a sum to be assessed by the court of not less than $500 nor more than $100,000 for the initial violation, nor more than $10,000 for each day after that on which the violation continues, and that shall reflect, when applicable:

4.1.1 Reasonable compensation in the nature of liquated damages for any adverse environmental effects caused by the violation, that shall be determined by the court according to the toxicity, degradability, and dispersal characteristics of the substance discharged, the sensitivity of the receiving environment, and the degree to which the discharge degrades existing environmental quality;

4.1.2 Reasonable costs incurred by the State in detection, investigation, and attempted correction of the violation;

4.1.3 The economic savings realized by the person in not complying with the requirements for which a violation is charged; and

4.1.4 The need for an enhanced civil penalty to deter future noncompliance.

4.2 Injunctive Relief

4.2.1 Under AS 46.03.820, the Department can order an activity presenting an imminent or present danger to public health or that would be likely to result in irreversible damage to the environment be discontinued. Upon receipt of such an order, the activity must be immediately discontinued.

4.2.2 Under AS 46.03.765, the Department can bring an action in Alaska Superior Court seeking to enjoin ongoing or threatened violations for Department-issued permits and Department statutes and regulations.

4.3 Criminal Action

Under AS 46.03.790(h), a person is guilty of a Class A misdemeanor if the person negligently:

4.3.1 Violates a regulation adopted by the Department under AS 46.03.020(12);

4.3.2 Violates a permit issued under the program authorized by AS 46.03.020(12);

4.3.3 Fails to provide information or provides false information required by a regulation adopted under AS 46.03.020(12);

4.3.4 Makes a false statement, representation, or certification in an application, notice, record, report, permit, or other document filed, maintained, or used for purposes of compliance with a permit issued under or a regulation adopted under AS 46.03.020(12); or

4.3.5 Renders inaccurate a monitoring device or method required to be maintained by a permit issued or under a regulation adopted under AS 46.03.020(12).

4.4 Other Fines

Upon conviction of a violation of a regulation adopted under AS 46.03.020(12), a defendant who is not an organization may be sentenced to pay a fine of not more than $10,000 for each separate violation (AS 46.03.790(g)). A defendant that is an organization may be sentenced to pay a fine not exceeding the greater of: (1) $200,00; (2) three times the pecuniary gain realized by the defendant as a result of the offense; or (3) three times the pecuniary damage or loss caused by the defendant to another, or the property of another, as a result of the offense (AS 12.55.035(c)(B), (c)(2), and (c)(3)).

Appendix B

Acronyms

The following acronyms are common terms that may be found in an Alaska Pollutant Discharge Elimination System (APDES) permit.

18 AAC 15	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 15: Administrative Procedures
18 AAC 60	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 60: Solid Waste Management
18 AAC 70	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 70: Water Quality Standards
18 AAC 72	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 72: Wastewater Disposal
18 AAC 83	Alaska Administrative Code. Title 18 Environmental Conservation, Chapter 83: Alaska Pollutant Discharge Elimination System

All chapters of Alaska Administrative Code, Title 18 are available at the Alaska Administrative Code database http://www.legis.state.ak.us/cgi-bin/folioisa.dll/aac

40 CFR	Code of Federal Regulations Title 40: Protection of Environment
AAC	Alaska Administrative Code
DF&G	Alaska Department of Fish and Game
DNR	Alaska Department of Natural Resources
AML	Average Monthly Limit
API	American Petroleum Institute
APDES	Alaska Pollutant Discharge Elimination System
AS	Alaska Statutes
AS 46.03	Alaska Statutes Title 46, Chapter 03: Environmental Conservation. Available at http://www.legis.state.ak.us/default.htm
BAT	Best Available Technology Economically Achievable
BCT	Best Conventional Pollutant Control Technology
BOD_5	Biochemical Oxygen Demand, 5-day
BMP	Best Management Practice
BPD or bbl/day	Barrels Per Day
BPJ	Best Professional Judgment
BPT	Best Practicable Control Technology Currently Available
CFR	Code of Federal Regulations
COD	Chemical Oxygen Demand
CPI	Coalescing Plate Interceptor
CSP	Contaminated Sites Program

CWA	Clean Water Act
CV	Coefficient of Variation
DAF	Dissolved Air Flotation
DCCED	Department of Commercer, Community, and Economic Development
DEC	Alaska Department of Environmental Conservation
DIB	De-isobutanizer
DMR	Discharge Monitoring Report
DNR	Alaska Department of Natural Resources
EC_{25}	Effect Concenration 25%
EFH	Essential Fish Habitat
ELG	Effluent Limit Guidelines
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FC	Fecal Coliform Bacteria
FWS	Fish and Wildlife Service
g/Kg	Grams Per Kilogram
GP	General Permit
GPD or gpd	Gallons Per Day
GPM or gpm	Gallons Per Minute
IC_{25}	Inhibition Concentration 25%
IP	Individual Permit
LC_{50}	Lethal Concentration 50%
LDA	Legislatively Designated Areas
LPD	Liters Per Day
LPG	Liquefied Petroleum Gas
LTA	Long Term Average
MDL	Maximum Daily Limit
mg/L	Milligrams Per Liter
MGD or mgd	Million gallons per day
µg/L	Micrograms Per Liter
ML	Minimum Level
MLLW	Mean Lower Low Water

m/s	Meters Per Second
MSGP	Multi-Sector General Permit
N/A	Not Applicable
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NOEC	No Observed Effect Concentration
NPDES	National Pollutant Discharge Elimination System
NSPS	New Source Performance Standards
POC	Parameter of Concern
PQL	Practical Quantification Limit
QA/QC	Quality Assurance/Quality Control
QAPP	Quality Assurance Project Plan
RBC	Rotating Biological Contactor
RPA	Reasonable Potential Analysis
RWC	Receiving Water Concentration
RWTS	Refinery Wastewater Treatment System
SCA	Secondary Containment Area
SOP	Standard Operating Procedures
SU	Standard Units
SWPPP	Storm Water Pollution Prevention Plan
TAH	Total Aromatic Hydrocarbons
TAqH	Total Aqueous Hydrocarbons
TBEL	Technology-based Effluent Limit
TMDL	Total Maximum Daily Load
TOC	Total Organic Carbon
TRC	Total Residual Chlorine
TRE	Toxicity Reduction Evalution
TIE	Toxicity Identification Evalution
TSS	Total Suspended Solids
TUa	Toxic Unit, Acute
TUc	Toxic Unit, Chronic

U.S.	United States
USC	United States Code
WAD	Weak Acid Dissociated
WET	Whole Effluent Toxicity
WLA	Wasteload Allocation
WQBEL	Water Quality-based Effluent Limit
WQS	Water Quality Standards

Appendix C

Definitions

The following are common definitions of terms associated with APDES permits. Not all the terms listed may appear in a permit. Consult the footnote references for a complete list of terms and definitions.

Alaska Pollutant Discharge Elimination System (APDES)[a]	Means the state's program, approved by EPA under 33 U.S.C. 1342(b), for issuing, modifying, revoking and reissuing, terminating, monitoring and enforcing permits and imposing and enforcing pretreatment requirements under 33 U.S.C. 1317, 1328, 1342, and 1345
Allowable Non-Storm Water Discharges	Fire fighting flows, fire water storage vessel and fire hydrant flushing discharges, including periodic fire suppression test discharges, and fire training discharges; Waters used to wash vehicles where detergents are not used; Water used for dust control; Potable water sources including uncontaminated waterline flushes and drinking fountain water; Landscape watering and irrigation drainage used on occasion for re-vegetation projects; Routine external building, pipeline, and power line wash down that does not use detergent or other compounds; Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used; Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids; Uncontaminated, non-turbid discharges springs or groundwater including groundwater stored in tanks for fire supression; Uncontaminated foundation or footing drains; and Electrical insulator steaming; Other uncontaminated discharges meeting water quality criteria that the Department approves on a case-by-case basis.
Annual	Means once per calendar year
Average	Means an arithmetic mean obtained by adding quantities and dividing the sum by the number of quantities
Average Monthly Limit[a]	Means the highest allowable average of "daily discharges" over a calendar month calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured for that month
Authorized Discharges	For this Permit, authorized discharges includes treated waste streams originating from refinery process units, treated contaminated groundwater and monitoring well purge water, contaminated storm water from refinery process areas, noncontact cooling water, utility water, tank draws, production well test water, fire test water, hydrostatic test water from pipelines and tanks, turnaround wastewater, and treated reformer catalyst regeneration wastewater, water removed from secondary containment areas, and uncontaminated storm water and allowable non-storm water discharges. Authorized waste streams in the discharge includes tank draws, hydrostatic test water, spill response water, contaminated groundwater purge water, pipeline pig and associated equipment washdown water, and seasonal storm water collected at the Kenai Pipeline Facility, or Nikiski Terminal, and transported to the refinery for treatment.
Ballast water	Means harbor or seawater added or removed to maintain the proper ballast floater level and ship draft and to conduct jack-up rig related sea bed support capability tests (e.g. jack-up rig preload water).
Best Management Practices (BMPs)[a]	Means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site

	runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage areas.
Biannual	Twice per year or seminannual
Biochemical Oxygen Demand (BOD)[c]	Means the amount, in milligrams per liter, of oxygen used in the biochemical oxidation of organic matter in five days at 20° C
Biocide	Means any chemical agent used for controlling the growth of or destroying nuisance organisms (e.g., bacteria, algae, and fungi)
Bypass[a]	Means the intentional diversion of waste streams from any portion of a treatment facility
Cessation or to Cease	Means to completely stop or discontinue an activity
Clean Water Act (CWA)[a]	Means the federal law codified at 33 U.S.C. 1251-1387, also referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972
Coastal Waters	Means any location in or on a water of the United States landward of the inner boundary of the territorial seas.
Color[b]	Means the condition that results in the visual sensations of hue and intensity as measured after turbidity is removed
Commissioner[a]	Means the commissioner of the Alaska Department of Environmental Conservation or the commissioner's designee
Composite Samples	Composite samples must consist of at least eight equal volume grab samples. 24 hour composite sample means a combination of at least eight discrete samples of equal volume collected at equal time intervals over a 24-hour period at the same location. A "flow proportional composite" sample means a combination of at least eight discrete samples collected at equal time intervals over a 24-hour period with each sample volume proportioned according to the flow volume. The sample aliquots must be collected and stored in accordance with procedures prescribed in the most recent edition of *Standard Methods for the Examination of Water and Wastewater*.
Contact Recreation[b]	Means activities in which there is direct and intimate contact with water. Contact recreation includes swimming, diving, and water skiing. Contact recreation does not include wading.
Criterion[b]	Means a set concentration or limit of a water quality parameter that, when not exceeded, will protect an organism, a population of organisms, a community of organisms, or a prescribed water use with a reasonable degree of safety. A criterion might be a narrative statement instead of a numerical concentration or limit.
Daily Discharge[a]	Means the discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants measured in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants with a limitation expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day.
Deck Drainage	Means any waste resulting from deck washings, spillage, rainwater, and runoff from gutters and drains including drip pans and work areas within facilities
Department[a]	Means the Alaska Department of Environmental Conservation

Design Flow[a]	Means the wastewater flow rate that the plant was designed to handle. Typically the maximum monthly flow rate for the treatment system.
Director[a]	Means the commissioner or the commissioner's designee assigned to administer the APDES program or a portion of it, unless the context identifies an EPA director
Discharge[a]	When used without qualification, discharge means the discharge of a pollutant
Discharge of a Pollutant[a]	Means any addition of any pollutant or combination of pollutants to waters of the United States from any point source or to waters of the contiguous zone or the ocean from any point source other than a vessel or other floating craft that is being used as a means of transportation. Discharge includes any addition of pollutants into waters of the United States from surface runoff that is collected or channeled by humans; discharges through pipes, sewers, or other conveyances owned by a state, municipality, or other person that do not lead to a treatment works; discharges through pipes, sewers, or other conveyances leading into privately owned treatment works; and does not include an addition of pollutants by any indirect discharger.
Domestic Wastewater[c]	Means waterborne human wastes or graywater derived from dwellings, commercial buildings, institutions, or similar structures. "Domestic wastewater" includes the contents of individual removable containers used to collect and temporarily store human wastes.
Effluent[b]	Means the segment of a wastewater stream that follows the final step in a treatment process and precedes discharge of the wastewater stream to the receiving environment
Estimated	Means a way to estimate the discharge volume. Approvable estimations include, but are not limited to, the number of persons per day at the facility, volume of potable water produced per day, lift station run time, etc.
Excluded area	Means an area not authorized as a receiving water under a permit
Fecal Coliform Bacteria (FC)[b]	Bacteria that can ferment lactose at 44.5° + 0.2°C to produce gas in a multiple tube procedure. Fecal coliform bacteria also means all bacteria that produce blue colonies in a membrane filtration procedure within 24 ± 2 hours of incubation at 44.5° + 0.2°C in an M-FC broth.
Fish[b]	Means any of the group of cold-blooded vertebrates that live in water and have permanent gills for breathing and fins for locomotion
Free Oil	Any oil contained in a waste stream that when discharged will cause a film or sheen upon or a discoloration of the surface of the receiving water
Garbage	Means all kinds of victual, domestic, and operational waste, excluding fresh fish and part thereof, generated during the normal operation and liable to be disposed of continuously or periodically except dishwater, graywater, and those substances that are defined or listed in other Annexes to MARPOL 73/78
Geometric Mean	The geometric mean is the N^{th} root of the product of N. All sample results of zero will use a value of 1 for calculation of the geometric mean. Example geometric mean calculation: $\sqrt[4]{12x23x34x990} = 55$.
Grab Sample	Means a single instantaneous sample collected at a particular place and time that represents the composition of wastewater only at that time and place
Graywater[b]	Means wastewater from a laundry, kitchen, sink, shower, bath, or other domestic source that does not contain excrement, urine, or combined storm water
Hydrostatic Test Water	Means water used for pressure testing to verifies leaks are not present in pipelines and tanks as well as contained water associated with valve vault discharges, basement discharges, non-

	hydrocarbon bearing lines, water tanks, ancillary pipelines related to oil and gas facilities, and utilidor discharges.
Influent	Means untreated wastewater before it enters the first treatment process of a wastewater treatment works
Maximum Daily Limit[a]	Means the highest allowable "daily discharge"
Mean[b]	Means the average of values obtained over a specified period and, for fecal coliform analysis, is computed as a geometric mean
Measured	Means the actual volume of wastewater discharged using appropriate mechanical or electronic equipment to provide a totalized reading. Measure does not provide a recorded measurement of instantaneous rates.
Milligrams per Liter (mg/L)[b]	Means the concentration at which one thousandth of a gram (10^{-3} g) is found in a volume of one liter. It is approximately equal to the unit "parts per million (ppm)," formerly of common use.
Mixing Zone[b]	Means a volume of water adjacent to a discharge in which wastes discharged mix with the receiving water
Mobile Spill Response Discharge	Means discharges associated with treated snowmelt, rain, or other water that has come into contact with hydrocarbons such as motor oil, diesel, gasoline, transmission, hydraulic oil from small leaks that are collected from motorized vehicles and equipment. Other sources include, but may not be limited to, drip pan water and shop melt water. Only water impacted by petroleum hydrocarbons is considered under mobile spill response discharge and a treatment system must be used that is capable of removing free-phase and dissolved-phase hydrocarbons from the wastewater.
Month	Means the time period from the 1st of a calendar month to the last day in the month
Monthly Average	Means the average of daily discharges over a monitoring month calculated as the sum of all daily discharges measured during a monitoring month divided by the number of daily discharges measured during that month
New Facility	Means a facility that has not operated in the area specified in the Notice of intent (NOI) prior to the submission of the NOI.
Offshore	Means offshore of the inner boundary of the territorial seas.
Facilities.	Means any a facility or activity that is directly related to the operation of an oil and gas exploration, production or development facility, including service companies, on the North Slope Borough.
Open waters	Means ponds, lakes, streams, rivers, tundra, wetlands, and marine waters not covered by ice.
Permittee	Means a company, organization, association, entity, or person who is issued a wastewater permit and is responsible for ensuring compliance, monitoring, and reporting as required by the permit
pH[g]	Means a measure of the hydrogen ion concentration of water or wastewater; expressed as the negative log of the hydrogen ion concentration in mg/L. A pH of 7 is neutral. A pH less than 7 is acidic, and a pH greater than 7 is basic.
Pollutant Load	The amount of pollutant being transported in the effluent at a given time

Primary Treatment [c]	Means wastewater treatment that: (a) will subsequently discharge wastewater to land or waters that are not waters of the United States and substantially removes all floating and settleable solids; or uses fine screens with 0.04-inch or smaller openings; or (b) will subsequently discharge wastewater to waters of the United States and uses screening, sedimentation, and skimming adequate to remove at least 30 percent of the biochemical oxygen demanding material and of the suspended solids in the treatment works influent; and disinfection, where appropriate.
Principal Executive Officer[a]	Means the chief executive officer of the agency or a senior executive officer having responsibility for the overall operations of a principal geographic unit of division of the agency
Pollutant[a]	Means dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under 42 U.S.C. 2011), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, or agricultural waste discharged into water
Qualified Person	Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at your facility or BMPs necessary to achieve permit compliance and who can also evaluate the effectiveness of control measures.
Receiving Waterbody	Means lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, straits, passages, canals, the Pacific Ocean, Gulf of Alaska, Bering Sea, and Arctic Ocean, in the territorial limits of the state, and all other bodies of surface water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially in or bordering the state or under the jurisdiction of the state. (See "Waters of the U.S." at 18 AAC 83.990(77))
Recommencing Facilities	Those facilities that may have let permit coverage lapse but still meet the coverage requirements of the GP.
Report	Report results of analysis.
Residual Chlorine	Means chlorine remaining in water or wastewater at the end of a specified contact period as combined or free chlorine.
Responsible Corporate Officer[a]	Means a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function or any other person who performs similar policy or Decision making functions for the corporation The Responsible Corporate Officer can also be the manager of one or more manufacturing, production, or operating facilities if the requirements of 18 AAC 83.385(a)(1)(B)(i)-(iii) are met.
Secondary Containment Area Storm Water	Discharges of uncontaminated precipitation or snow melt water that has accumulated in the diked areas around hydrocarbon tanks, tank farms, fuel transfer stations and tanker truck loading racks which provide an emergency storage area and help to prevent accidental spills from reaching the environment or Waters of the U.S. These areas are typically constructed of steel, synthetic liners or synthetic lines with a layer of gravel on top to protect the liner and are required by 40 CFR 112 – Oil Pollution Prevention or 18 AAC 75 – Oil and Other Hazardous Substances Pollution Control, Article 1.
Secondary Recreation[b]	Means activities in which incidental water use can occur. Secondary recreation includes boating, camping, hunting, hiking, wading, and recreational fishing. Secondary contact recreation does not include fish consumption.

Sensitive Biological Areas or Habitats	Means significant or unique biological communities, including areas of high biological productivity, diversity, or vulnerability, as well as important habitat areas for Arctic species
Severe Property Damage[a]	Means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
Sheen[b]	Means an iridescent appearance on the water surface
Shellfish[b]	Means a species of crustacean, mollusk, or other aquatic invertebrate with a shell or shell-like exoskeleton in any stage of its life cycle
Stable Ice	Means landfast or bottom-fast ice that becomes stationary, or stable, enough to support activities on the ice surface (e.g., winter ice programs).
Static Sheen Test	A test intended to indicate the presence of free oil when drilling fluid, drilled cuttings, deck drainage, well treatment fluids, completion and workover fluids, produced water or sand or excess cement slurry are discharged into offshore waters.
Storm Water Conveyance System	For this Permit, storm water conveyance system means drainage facilities and features that collect, contain, and provide for the flow of surface and storm water from the highest points on the land down to a receiving water. Conveyance systems are made up of natural elements and of constructed facilities. For this Permit, storm water conveyance systems does not include subsurface disposal systems regulated per 18 AAC 72 – Wastewater Disposal.
Storm Water Discharge	Storm water discharges consist of runoff water resulting from precipitation, snow, and snowmelt events that has not come into contact with contaminates and certain allowable non-storm water sources that are discharged with storm water from oil and gas related industrial areas or activities.
Territorial Seas	Means the belt of the seas measured from the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the off shore limit of inland waters, and extending off shore a distance of three miles.
Total Suspended Solids (TSS)[g]	Means a measure of the filterable solids present in a sample, as determined by the method specified in 40 CFR Part 136
Turnaround	For the purpose of this Permit, turnaround means scheduled events wherein the refinery is shutdown for an extended period for revamping and/or renewing a number of process units. The shutdown of individual process units that does not require the shutdown of the refinery is not considered turnaround in this Permit.
Twice per year	Means two time periods during the calendar year (syn. semiannual): January through June and July through December
Upset[a]	Means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Wastewater Treatment	Means any process to which wastewater is subjected in order to remove or alter its objectionable constituents and make it suitable for subsequent use or acceptable for discharge to the environment
Waters of the United States or Waters of the U.S.	Has the meaning given in 18 AAC 83.990(77)
Water Recreation[b]	See contact recreation or secondary recreation
Water Supply[b]	Means any of the waters of the United States that are designated in 18 AAC 70 to be protected for fresh water or marine water uses. Water supply includes waters used for drinking, culinary, food processing, agricultural, aquacultural, seafood processing, and industrial purposes. Water supply does not necessarily mean that water in a waterbody that is protected as a supply for the uses listed in this paragraph is safe to drink in its natural state.

a) See 18 AAC 83

b) See 18 AAC 70.990

c) See 18 AAC 72.990

d) See 40 CFR Part 136

e) See EPA Technical Support Document

f) See Standard Methods for the Examination of Water and Wastewater 18th Edition

g) See EPA Permit Writers Manual